

## Affordability Trends 1981-2001: An Analysis of Selected Metropolitan Regions in Canada

### INTRODUCTION

This *Highlight* presents the findings of an External Research Project that examined the changing levels of housing affordability in Canada between 1981 and 2001. While incomes rose and income inequality on many measures was relatively stable, housing affordability continued to be a problem for many households. This could be due to factors on the supply side, in terms of homeownership or rental costs. Or, the overall rise in incomes may not have been experienced, to the same extent, by housing sub-groups such as renters or young households looking to buy a home.

### Key Questions and Methods

The project set out to examine and explain the issue of worsening housing affordability in the 20 period from 1981 to 2001 when incomes rose in Canada and income inequality did not. In doing so, the following hypotheses were examined:

- The cost of housing could have risen faster than other prices, and as a result housing came to command a larger share of household income over time; or
- The quality and/or quantity of housing consumed per household changed so that households were paying "more for more," as it were. The quality of accommodation could have increased as a result of changes in standards, size or "fit and finish" items such as fixtures; or
- The overall income trends did not capture differences between housing sub-groups such as owners versus renters, lone parent households, seniors or other groups.

In order to examine these questions, a series of indicators were developed and calculated using the Census household microdata files that contain census data for a representative sub-sample of

households.<sup>1</sup> Unfortunately, the study could not include the 1971 and 1976 censuses due to data limitations in those years. The Census Metropolitan Areas (CMAs) examined with the microdata files were: Halifax, Quebec, Montréal, Toronto, Ottawa, Hamilton, St. Catharines, Kitchener, London, Winnipeg, Calgary, Edmonton and Vancouver.

The project had three major parts:

- A literature review that began with an examination of income inequality trends in Canada. Internationally, the review examined housing affordability measurement techniques in use elsewhere.
- In the second and main part of the study, indicators were calculated using Census public-use microdata files to examine affordability trends. Indicators included:
  - affordability standard (where a household spending 30% or more of total income on shelter is said to be living below this standard),
  - housing consumption (persons per room),
  - housing quality (need for repair),
  - housing expenditures in total, as well as per room and per person,
  - changing demographics of the tenure groups as expressed by the age of the household maintainer and the type of household,
  - income levels and income share by tenure.
- In the final part, macroeconomic indicators such as Gross Domestic Product, the unemployment rate and the Consumer Price Index were considered to complete the context.

1 The Census collects the income for the previous year and the shelter cost for the month preceding the census

## FINDINGS

## Literature Review

In Canada, the gap of income inequality is less than the United Kingdom (U.K.) or United States (U.S.) but more than many European countries. While income inequality in Canada has risen and fallen in response to economic cycles, it has been relatively stable when compared to other countries. Over the 1980s, inequality did not increase in Canada or the Netherlands but did increase in Sweden, the U.K. and the U.S. Comparisons between Canada and the U.S. have shown that income inequality and income polarization are less in Canada than the U.S. and that incomes at the bottom are higher than in the U.S. While the number of families with half the median income declined in both countries, the incidence of low income was 50% higher in the U.S. than in Canada.

Like income, housing costs were shown through the literature review, to be impacted by economic cycles.<sup>2</sup> In Canada, between 1970 and 2000, when there was positive movement in the economy, house prices increased over the cycle by an average of 3.2%. When the Canadian economy was in decline, house prices followed suit, declining during the cycle, on average, 1.4%.

Wealth inequality in Canada increased over the period 1984 to 1999.<sup>3</sup> Of all wealth components, Registered Retirement Savings Plans (RRSPs), contributed the most to the increase in wealth inequality. Median wealth fell in the bottom three income deciles but rose 27% in the top decile. Only the top decile increased its share of total net worth between 1984 and 1999. In addition, the changing demographics of households (e.g. more female single parents) has had an "ambiguous effect" on wealth inequality. When the top 1% of family units are excluded, changes in family structure account for a greater proportion of the growth in wealth inequality.

The wealth discrepancy between owners and renters also increased. Since owners had higher incomes, they were able to accumulate more wealth. Also, homeownership, as a passive form of wealth accumulation, increased the wealth gap between renters and owners.

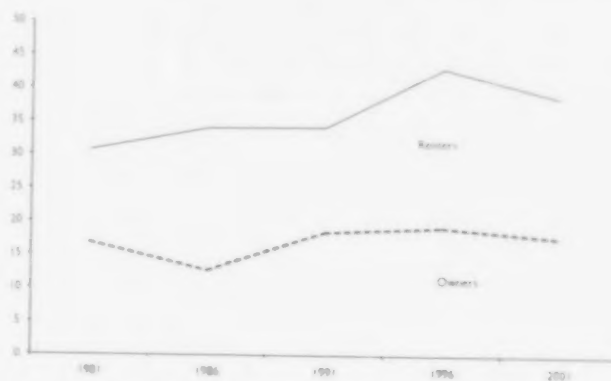
The international literature review suggests that housing affordability, on some measures, was worse in other countries than in Canada. For example, the ratio of median house price to median household income<sup>4</sup> in Canada was 3.6,<sup>5</sup> making it the most affordable country assessed using this measure. Other countries surveyed included the U.S. 4.6, U.K. 5.5, New Zealand 5.9, Ireland 6.0 and Australia 6.2.

However, aggregate measures such as median house prices compared to median household income do not capture the incidence or severity of housing affordability at the household level, only whether the median household was able to afford the median home.

## AFFORDABILITY INDICATORS

## Housing Affordability and Tenure

Over the period 1981 to 2001, the housing situation of renters worsened, relative both to earlier years and to owners. The percentage of renters paying 30% or more of their income on shelter increased from 31% in 1981 to 43% in 1996 and then decreased to 39% in 2001 (see Figure 1). The percentage of owners with affordability problems peaked at 19% in 1996.



Source: Estimated from Census Microdata files.

Figure 1 Percentage of households below affordability standard average of selected CMAs, 1981-2001

2. Girouard, Nathalie, Mike Kennedy, Paul van den Noord, Christophe André, 2006, "Recent House Price Developments: The Role of Fundamentals", OECD, Economics Department Working Paper No. 474.
3. Morissette, René, Xuelin Zhang and Marie Drolet, 2002, "The Evolution of Wealth Inequality in Canada, 1984-1999", Statistics Canada, *Business and Labour Market Analysis*, No. 187.
4. See 2006 report by Demographia, at Demographia.com.
5. This ratio reflects only the centres covered in the study (Vancouver, Toronto, Hamilton, Montréal, Ottawa, Edmonton, Québec and Winnipeg), and not all of Canada.

## Income and Wealth Distribution

Income inequality was not rising in Canada between 1981 and 2001, based on the findings of the literature review and confirmed by Statistics Canada studies. In fact, Canada compared favourably with other OECD countries in this regard. However, there was a growing income gap between owners and renters. The ratio of renter-to-owner household income declined between 1981 and 2001 from 64% to 46%, as renters were increasingly drawn from the bottom two income quintiles. This change is partially explained by the changing household composition among renters towards a higher concentration of one-person and single parent households (see Figure 2).

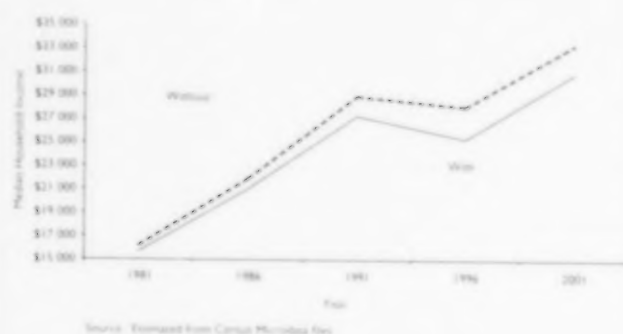


Figure 2 Median income for renters, with and without household composition change, 1981-2001

## The Cost of Housing

In gross terms, owners spend more than renters for shelter. The ratio of renter-to-owner shelter costs rose to 80% in 1986 and then decreased in the period to 2001 (see Figure 3), indicating that owner shelter costs increased at a faster rate than those of renters. Although, for Census Metropolitan Areas (CMAs) as a whole, median shelter cost per room rose for all tenures, it rose more sharply for owners than for renters except in the period 1981-1986; however, experience varied depending on the CMA. Based on median shelter costs, renters paid more per room than owners without mortgages but also spent more per room than those with mortgages in some cities at times.

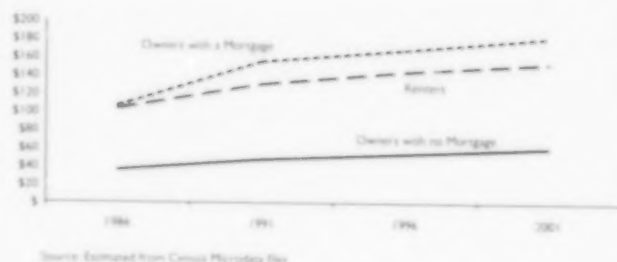


Figure 3 Median shelter cost per room for owners with and without mortgage and renters, 1986-2001

The increase in shelter costs outpaced that of incomes for both owners and renters over most of the period 1981 to 2001 (see Figure 4). For most of the period, renters' income grew more slowly than rents; renters' income actually fell in the period 1991-1996. Indeed, the year 1996 was a particularly low point for renters in terms of affordability, possibly as a result of the fairly deep recession in 1991. Their situation improved somewhat in the last intercensal period covered in this review, namely from 1996-2001. Owners fared a little better but their incomes lagged behind their shelter cost for two of the four intercensal periods.

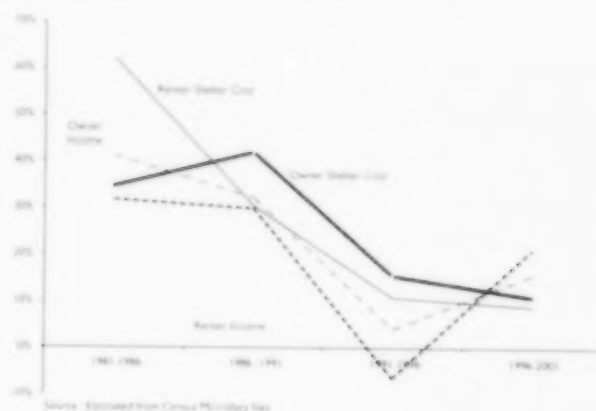


Figure 4 Percentage change in renter and owner income and shelter cost, 1981-2001

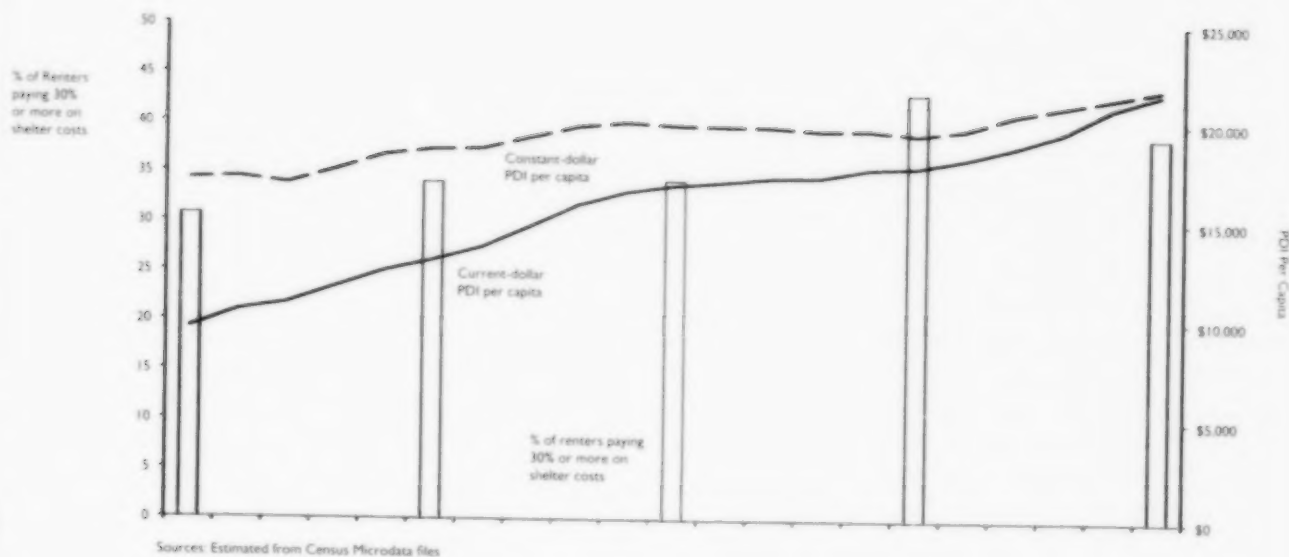
### Housing Consumption

Measured in rooms per dwelling or persons per room, there was no major increase in housing consumption over the period. At the same time, an increasing percentage of both owners and renters felt that their dwellings were in need of repair, indicative (at the least) that the quality of the stock was not improving significantly. So neither an increase in the quantity, nor improvement in the state of repair of housing, explains a rising incidence of affordability problems.

### Economic Cycles and Housing Affordability

An examination of affordability trends with reference to macroeconomic indicators identified that, following the recessions of 1980-1981 and 1991-1992, there was a discernible increase in the percentage of renters devoting 30% or more of their income to their shelter costs at the time of the following Census. The increase was larger in 1996 than in 1986, reflecting the deeper recession in 1991-1992. This would tend to confirm the relationship between the level of overall economic activity and the incidence of affordability problems. The increase in unemployment may have been the link between the economic downturn and the increase in the incidence of affordability problems, although the relationship was not very strong.

Still, over the period 1981 to 2001 there was an increase in homeownership because of declining interest rates, reduced down payment requirements for obtaining a mortgage, economic growth and the increasing age of household maintainers.



**Figure 5** Personal disposable income (PDI) per capita in current and constant 2002 dollars and per cent of renters paying 30% or more of income for housing, for average of selected CMAs, 1981-2001

**Table 1** Ratio of the median value of dwellings to the median household income of renters with primary maintainers aged 25-45

	1981	1986	1991	1996	2001
Halifax	3.38	3.14	3.04	3.56	3.73
Québec	3.22	2.68	2.98	3.52	2.82
Montréal	3.20	3.19	4.23	4.20	3.68
Ottawa-Hull	3.03	3.31	4.17	4.32	4.04
Toronto	4.50	4.32	6.66	5.98	5.96
Hamilton	2.96	3.41	5.41	5.13	5.22
St. Catharines	4.17	3.38	4.67	4.75	4.29
Kitchener	3.31	3.42	4.89	4.45	3.89
London	3.35	3.39	4.83	4.94	4.47
Winnipeg	3.72	3.23	3.41	3.59	3.21
Calgary	6.02	3.34	4.08	4.34	4.46
Edmonton	4.29	3.20	3.50	4.18	3.71
Vancouver	8.98	4.63	6.11	8.31	6.78
Total	3.85	3.59	4.84	4.97	4.71

Source: Estimated from Census Microdata files

With increasing house prices, renters were faced with a larger financial hurdle, relative to their incomes, to access homeownership. One measure of renter accessibility to homeownership is a comparison of the median cost of a home to the median income of a household with a maintainer in the 25-44-year age group (the "homebuying demographic cohort," as it were). On this measure<sup>6</sup>, renter accessibility deteriorated over the period 1981 to 2001 in most of the CMAs examined (see Table 1), with some moderation in the latest intercensal period of 1996-2001.

## CONCLUSION

The international literature review suggested that housing affordability, on some measures, was worse in other countries than in Canada. However, aggregate measures such as median house prices compared to median household income do not capture the incidence or severity of housing affordability at the household level; they are more useful as measures of change in housing affordability over time or for comparing one country to another. An analogous measure of renter accessibility to homeownership, used in the final section of the paper, compared the median cost of a home to the median income of a household with a maintainer in the 25-44 age group and found that, accessibility of renters to homeownership deteriorated between 1981 and 2001.

Although the cost of housing increased more than incomes for both renters and owners from 1981 to 2001, the increase was higher for renters. Consequently, growing gaps in income and housing affordability emerged between owners and renters.

Owners spent more than renters for shelter. The ratio of renter-to-owner shelter costs rose to 86% in 1986 and then decreased to 2001. For CMAs as a whole, shelter cost per room rose for both owners and renters, but it rose more sharply for owners than for renters (except between 1981 and 1986). Renters always paid more per room than owners without mortgages and also more than owners with a mortgage in some cities at times.

The rate of homeownership increased between 1981 and 2001 due to decreasing interest rates, more flexible borrowing terms designed to improved access for first time home owners, and the increasing age of household maintainers.

By examining housing affordability indicators and the economic situation in Canada, this project has established that, while Canada compares favourably to other countries, a significant percentage of households fall below the affordability standard (i.e. they pay 30% or more of income for shelter). Economic cycles in the country at large affect affordability levels on the income side. At the same time, shelter costs have increased.

6 Demographia (a website that provides international comparisons on home ownership affordability) suggests the following taxonomy of markets, based on the ratios of median house value to median household income: 3.0 or less as affordable; 3.1 to 4.0 as moderately unaffordable; 4.1 to 5.0 as seriously unaffordable and 5.1 and over as severely unaffordable.

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